

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 88-037

UPDATING WATER RECLAMATION REQUIREMENTS FOR:

CITY AND COUNTY OF SAN FRANCISCO AND  
SUNOL VALLEY GOLF AND RECREATION COMPANY,  
SUNOL VALLEY GOLF COURSE, SUNOL, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The Sunol Valley Golf Course is located about one mile south of the unincorporated town of Sunol, near Andrade Boulevard, adjacent to Interstate Highway I-680. The 36-hole public golf course lies on a 280 acre site and has about 115,000 visitors per year. The golf course is on land presently owned by the City and County of San Francisco and leased by Sunol Valley Golf and Recreation Company, a limited partnership, through an agreement, to operate it as a public golf course. These two entities are hereinafter called to as the discharger. Domestic water is supplied by the City and County of San Francisco
2. The discharger submitted a Report of Waste Discharge dated July 16, 1987, for update of its water reclamation requirements.
3. The golf course's clubhouse generates an annual average of about 3000 gallons per day (gpd) of sanitary wastes including water from a 100 seat restaurant, a 785 seating capacity banquet room and offices. Waste flow by gravity to a package treatment plant with a rated capacity of 14,000 gpd. The plant uses an extended aeration process to biologically treat wastes. Plant effluent flows to a 9,500 gallon chlorine contact tank and is pumped to an effluent holding pond. The 0.7 acre pond has a capacity of about 2 million gallons and is located about 2500 feet from the plant. Pond effluent flows to a second holding pond, where it is diluted with fresh water (pumped from Alameda Creek). The mixture, 10-20% effluent and 80-90% fresh water, is intended to reduce the total dissolved solids (TDS) concentration prior to irrigation. The diluted effluent is used to spray irrigate about 200 acres of the golf course during the dry-weather months. The discharger applies an average of 1.2 million gallons per year of treated effluent to the golf course in this manner.
4. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The water quality goals to be used in regulating water quality factors as set forth in the Basin Plan include maximum feasible reclamation or reuse of municipal, industrial, and agricultural wastewaters.

5. The Basin Plan identifies the following beneficial uses of Alameda Creek and contiguous water bodies:

- Water contact recreation
- Non-contact water recreation
- Wildlife habitat
- Warm fresh water habitat
- Fish Migration and spawning
- Industrial service and process supply
- Municipal and domestic supply
- Agricultural supply
- Groundwater supply
- Fresh water replenishment

6. This reclamation use is regulated by Regional Board Order No. 74-117 adopted on October 15, 1974.
7. The discharger has repeatedly violated effluent limits in Order 74-117 with respect to BOD and coliform organisms. These violations appears to be caused by poor operation and maintenance of the treatment plant and the absence of a qualified plant operator.

In addition, the discharger threatens to discharge wastes to surface waters due to an inadequately supported force main crossing an unnamed creek about 90 feet past the effluent pump station. The pump station lacks any emergency power in the event of a power outage. In addition, the lack of fencing or security at the treatment plant and disinfection unit pose a threat to treatment reliability.

In addition, the holding pond for diluted effluent receives upland runoff and overflows during most winters. In addition, high TDS concentrations in the diluted effluent have forced the discharger to reduce water reclamation rates recently, raising the possibility of insufficient effluent disposal rates.

8. The discharger has taken several steps recently to remedy these problems. The lessee has hired a Class 2 operator to run the treatment plant. The lessee has installed fencing around both the treatment plant and disinfection unit, and has installed an emergency power generator at the pump station. The lessee has also provided an updated water balance that demonstrates an adequate reclamation rate to avoid storage pond overflow.
9. There is no regional wastewater treatment facility available to the discharger at this time and the land is not within the service area of any public sewer maintenance district.

10. Section 13523 of the California Water Code provides that a Regional Board, after consultation with and reception of recommendations from the State Department of Health Services, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.
11. These water reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health Services as prescribed in Title 22, Section 60301 through Section 60355, California Administrative Code.
12. The reissuance of waste reclamation requirements is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
13. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
14. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that City and County of San Francisco and Sunol Valley Golf and Recreation Company, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder shall comply with the following:

A. Prohibitions

1. Discharge of waste in excess of 14,000 gpd (monthly average) from the treatment facilities is prohibited.
2. No waste shall be applied to any golf course irrigation areas during the wet weather season (November 15 through April 15). In addition, no reclaimed water shall be applied to the irrigation site during rainfall, or when soils are saturated to a point where runoff is likely to occur.
3. The use of reclaimed water shall not cause degradation of groundwater suitable for domestic use or cause an increase in any quality parameter that would make groundwater unsuitable for irrigation use.
4. The treatment, re-use, or distribution of reclaimed wastewater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

5. No waste or reclaimed water shall be allowed to escape from the discharger's property into waters of the State via surface flow, airborne spray or surfacing after percolation.
6. Reclaimed water shall not be used as a domestic or animal water supply. There shall be no cross-connection between potable water supply and piping containing reclaimed water. Supplementing reclaimed water with water used for domestic supply shall not be allowed except through an air-gap separation. An air-gap or reduced pressure principle device shall be provided at all domestic water service connections to reclaimed water use areas.

B. Specifications

1. The reclaimed water shall be at all times an adequately disinfected, oxidized water and shall meet the following quality limits prior to being applied to the golf course:
 

5-day BOD 20°C	40.0 mg/l
Dissolved oxygen	1.0 mg/l, minimum
Dissolved Sulfide	0.1 mg/l, maximum
Coliform Organisms	Median MPN shall not exceed twenty-three (23) coliform organisms per 100 milliliters of sample OR 240 MPN/100 ml for any two consecutive samples at some point in the treatment process. The median value will be determined from the bacteriological results of the last seven (7) analyses with sampled collected and analyzed daily.
2. All facilities, including pumps, piping, and valves, storage ponds, etc., which may at any time contain waste shall be adequately and clearly identified with warning signs informing the public that the facilities contain sewage which is unfit for human consumption.
3. The discharger shall manage its spray irrigation so as to prevent the breeding of insects and other vectors of health significance, and the creation of odors, slimes, or unsightly deposits.
4. Unless special circumstances warrant daytime application, irrigation of the golf courses should occur at night or early morning when the wind velocity is minimal and the golfers are absent. The grounds should have maximum opportunity to dry before used by the public. Daytime spraying of the greens with reclaimed water is permitted as long as golf course personnel are present during spraying.

5. The use of reclaimed water on the golf course shall cease immediately when any of the above specifications or prohibitions are not in compliance.
6. A minimum freeboard of at least two (2) feet shall be maintained in any storage ponds containing wastewater and the ponds shall be protected from flooding from a storm having a predicted frequency of once in 100 years. The ponds shall have sufficient capacity to contain all wastewater generated during the wet weather season when irrigation is prohibited.

C. Provisions

1. This Order supersedes Order No. 74-117, which is hereby rescinded.
2. The discharger shall comply with all sections of this Order immediately upon adoption.
3. The City shall meet the following time schedule for correcting problems associated with deferred maintenance of the treatment plant:

<u>Item</u>	<u>Date</u>
a. Submit list of diagnostic/maintenance tasks	May 1, 1988
b. Complete diagnostic and minor maintenance tasks	July 1, 1988
c. Submit schedule for major maintenance task.	July 1, 1988
4. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.	
5. The discharger shall permit the Board or its authorized representatives in accordance with California Water Code Section 13267(c):	
(a) Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;	
(b) Access to and copy at reasonable times any records that must be kept under the conditions of this Order;	
(c) Inspection at reasonable times of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and	
(d) To photograph, sample, and monitor at reasonable times for the purpose of assuring compliance with this Order.	

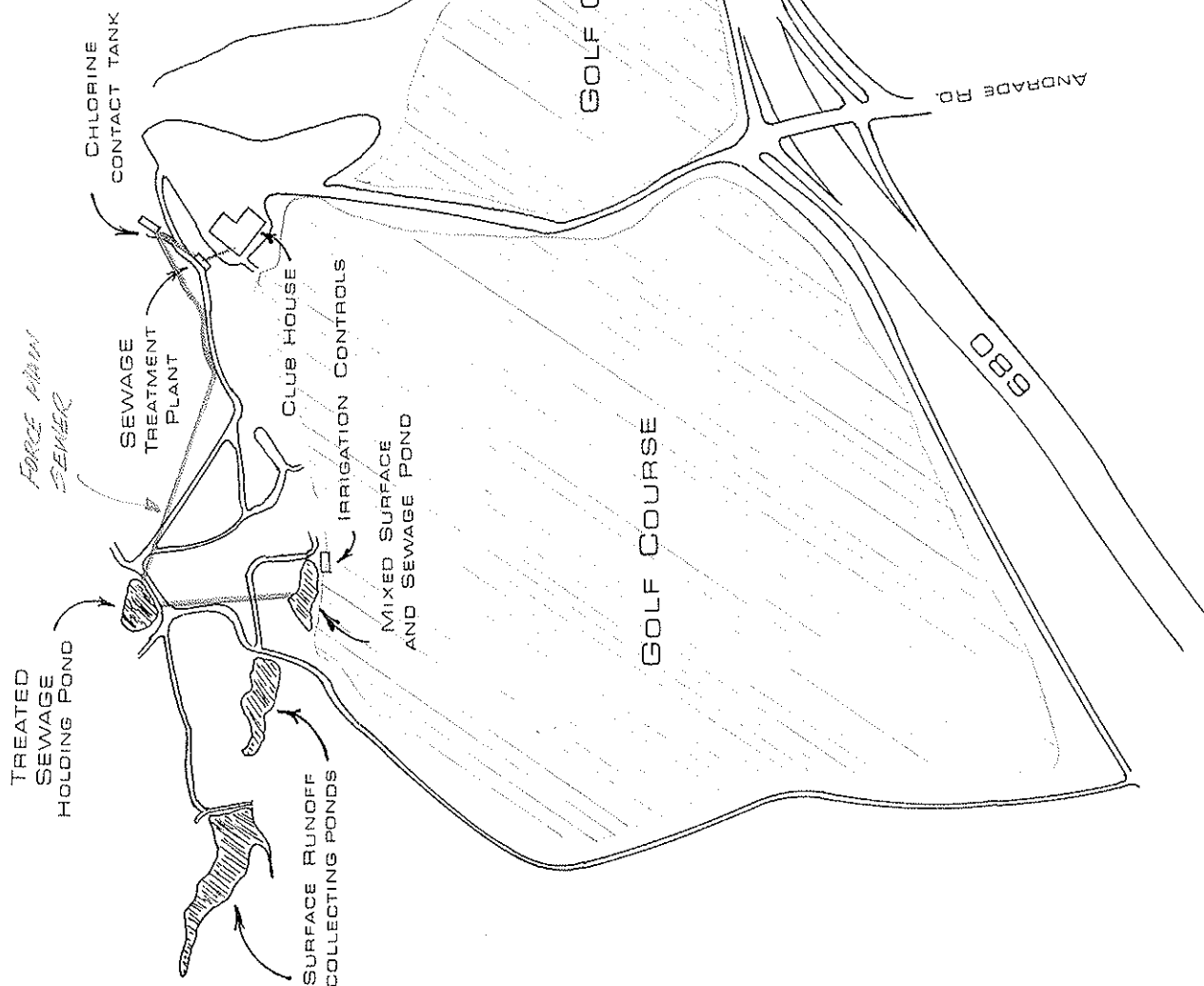
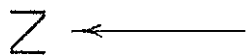
6. The discharger shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed or as modified to achieve compliance with this Order.
7. In the event of any change in control or ownership of land or water reclamation facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to this Board.
8. The discharger shall file with the Board a report on waste discharge at least 180 days before making any material change in the character, location, or volume of the reuse, except for emergency conditions in which case the Board shall be notified.
9. The Board will review this Order periodically and may revise the requirements when necessary.
10. The discharger shall assure that a qualified operator is responsible for treatment plant operations pursuant to State regulations (23 CAC Sections 3675 - 3680).

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of any Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on March 16, 1988.

  
ROGER B. JAMES  
Executive Officer

Attachments:

Map  
Self-Monitoring Program



IRRIGATION AREA



SCALE:  $\frac{3}{4}$ " = 1000'

DRAWN: FEB '88 AMCO

# SUNOL VALLEY GOLF AND RECREATION CO. FACILITIES PLAN

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM  
FOR

CITY AND COUNTY OF SAN FRANCISCO AND  
SUNOL VALLEY GOLF AND RECREATION COMPANY

SUNOL VALLEY GOLF COURSE

SUNOL, ALAMEDA COUNTY

ORDER NO. 88-037



I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. The principal purposes of a self-monitoring program are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. SAMPLING STATIONS

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-1	At any point in the reclaimed wastewater conveyance line between the point of discharge to the holding pond and the point at which all wastewater tributary to that line is present. (May be the same as E-1-D.)
E-1-D	At any point in the disinfection facilities for Waste E-1, at which point adequate contact with the disinfection is assured.

B. IMPOUNDMENTS FACILITIES

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	Located along the perimeter levees of each pond containing wastewaters at equidistant intervals not to exceed 50 feet.

(A sketch showing the locations of these stations should accompany each report.)

C. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
P-1 thru P-'n'	Located along the periphery of the irrigation area at equidistant intervals, not to exceed 500 feet.

(A sketch showing the locations of these stations should accompany each report.)

### III. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

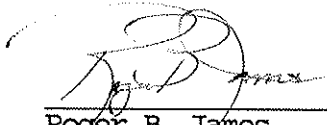
The discharger is required to perform observations, sampling, and analyses as specified in Table I.

### IV. REPORTING

- A. The discharger shall phone the Executive Officer immediately upon detecting a violation of any reclaimed water use specifications or prohibitions.
- B. The discharger shall submit quarterly reports on January 15, April 15, July 15, and October 15 of each year. The report shall include monitoring data for the quarter just ended and shall discuss any non-compliance, including planned corrective actions. The report shall be signed by a responsible official, who shall certify under penalty of law that the report contents are to the best of the signer's knowledge true and correct.

I, Roger B. James, Executive Officer, hereby certify that the forgoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution NO. 73-16 in order to obtain data and document compliance with water reclamation requirements established in Order No. 88-037.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

  
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Roger B. James  
Executive Officer

Effective Date: March 16, 1988.

Attachment: Table I

TABLE I  
SCHEDULE FOR SAMPLING, MEASUREMENTS AND ANALYSIS  
SUNOL VALLEY GOLF COURSE

Sampling Station	E-1		E-1-D	L	P
Type of sample	G	C-24	G	O	O
Flow Rate (gpd)		D			
BOD, 5-day (mg/l)		W			
Chlorine Residual (mg/l)	5/W				
Settleable Matter (ml/l hr.)	D				
Total Suspended Matter (mg/l)		W			
Oil and Grease (mg/l)	W				
Coliform, Total (MPN/100 ml)			5/W		
Ammonia Nitrogen (mg/l)		Q			
Nitrate Nitrogen (mg/l)		Q			
Total Organic Nitrogen (mg/l)		Q			
Total Phosphate (mg/l)		Q			
pH (units)	W				
Dissolved Oxygen (mg/l & % saturation)	W				
Temperature (° C)	W				
Sulfides (if DO <1.0 mg/l)	W				
Total & Dissolved (mg/l)					
All Applicable				(1)W	(1)W
Standard Observation					

- 1) Observe and report on evidence of reclaimed water used for irrigation escaping from spray disposal area via (1) surface flow, (2) resurfacing after percolation and/or (3) airborne spray.

LEGEND

Type of Sample

G = grab sample  
C-24 = 24 hour composite sample  
O = observation

Frequency of Sampling

D = daily  
W = weekly  
Q = quarterly  
2/W = 2 days per week